

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant: Franz Amtmann

Group Art Unit: 2612

Serial No.: 10/525,810

Examiner: Jiang, Yong Hang

Filed: September 2, 2005

Confirmation No.: 9914

For: METHOD OF INVENTORYING TRANSPONDERS BY MEANS OF A  
COMMUNICATION STATION

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37(a)

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner dated December 10, 2010, which finally rejected claims 1, 3, 5-8, 10, 12-14, and 16-25 in the above-identified application. The Office date of receipt of Appellant's Notice of Appeal was March 10, 2010. This Appeal Brief is hereby submitted pursuant to 37 C.F.R. § 41.37(a).

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## **I. REAL PARTY IN INTEREST**

The real party in interest is the assignee of the full interest in the invention, NXP B.V., of Eindhoven, Netherlands.

## **II. RELATED APPEALS AND INTERFERENCES**

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

## **III. STATUS OF CLAIMS**

Claims 1, 3, 5-8, 10, 12-14, and 16-25 are pending.

No claims are withdrawn.

Claims 1, 3, 5-8, 10, 12-14, and 16-25 stand rejected as follows:

Claims 1, 3, 7, 8, 10, 14, 16, 17, and 20-22 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Bauer et al. (U.S. Pat. No. 7,084,769, hereinafter "Bauer") in view of Cesar et al. (U.S. Pat. No. 6,172,596, hereinafter "Cesar"), and further in view of Vacherand et al. (U.S. Pat. No. 6,650,228, hereinafter "Vacherand").

Claims 5, 12, 13, 18, and 19 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Bauer in view of Cesar and Vacherand, and further in view of Meier (U.S. Pat. No. 6,323,566).

Claim 6 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Bauer in view of Cesar, Vacherand, and Meier, and further in view of Walker (GB 2,288,952A).

Claim 25 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Bauer in view of Cesar and Vacherand, and further in view of Bowers et al. (U.S. Pat. No. 5,883,582, hereinafter "Bowers").

Claims 23 and 24 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Bauer in view of Cesar, Vacherand, and Bowers, and further in view of Vercellotti et al. (U.S. Pat. No. 5,266,925, hereinafter "Vercellotti").

Claims 1, 3, 5-8, 10, 12-14, and 16-25 are the subject of this appeal. A copy of claims 1, 3, 5-8, 10, 12-14, and 16-25 is set forth in the Claims Appendix.

#### **IV. STATUS OF AMENDMENTS**

No amendments were filed subsequent to final rejection.

#### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

This section of this Appeal Brief is set forth to comply with the requirements of 37 C.F.R. § 41.37(c)(1)(v) and is not intended to limit the scope of the claims in any way. Examples of implementations of the limitations of independent claims 1, 7, 8, and 14 are described below.

The language of claim 1 relates to a method of inventorying at least one transponder by means of a communication station. Page 3, lines 28-34 and page 4, lines 1 and 2. The method includes that the communication station emits an unmodulated carrier signal in a communications range. Page 3, lines 29 and 30. The method also includes that the transponder on entering the communications range independently generates a presence-signaling signal and emits the presence-signaling signal in the communications range. Page 3, lines 30 and 31, page 5, lines 28-32, and page 14, lines 17-28; Fig. 2. The method also includes that the communication station on receiving a presence-signaling signal emits an inventorying command signal in the communications range. Page 3, lines 32 and 33. The method also includes that the transponder on receiving the inventorying command signal emits a response signal in the communications range permitting the inventorying of the transponders. Page 3, lines 33 and 34 and page 4, line 1. The method also includes that the communication station, on correctly receiving a response signal undertakes inventorying of the transponders. Page 4, lines 1 and 2. The method also includes that the transponder emits the presence-signaling signal with a first signal duration and the response signal with a second signal duration, where the first signal duration is shorter than the second signal duration. Page 15, lines 11-15, page 18, lines 30-34, and page 19, lines 1 and 2.

The language of claim 7 relates to a communication station for communication with at least one transponder and for inventorying at least one transponder. Page 6, lines

27-30; Fig. 1, communication station 1. The communication station includes station transmission means for emitting and receiving signals. Page 9, lines 13-24; Fig. 1, station transmission means 18. The communication station also includes carrier signal generating means for generating an unmodulated carrier signal that is emitted by the station transmission means in a communications range. Page 8, lines 21-25; Fig. 1, carrier signal generation means 15. The communication station also includes presence-signaling signal detection means for detecting a presence-signaling signal that is independently generated and emitted by the transponder and received by the station transmission means. Page 5, lines 28-32, page 7, lines 29-31, page 9, lines 13-24, and page 14, lines 17-28; Fig. 1, presence-signaling signal detection means 9, Fig. 2. The communication station also includes inventorying command signal generating means for generating an inventorying command signal that can be activated as a function of the detection of a presence-signaling signal. Page 7, lines 31-34; Fig. 1, command signal generating means 8. The communication station also includes response signal detection means for detecting a response signal which is generated and emitted by the transponder in response to a received inventorying command signal and is received by the station transmission means and which permits inventorying of the transponders. Page 8, lines 1-6; Fig. 1, response signal detection means 10. A signal duration of the presence-signaling signal is shorter than a signal duration of the response signal. Page 15, lines 11-15, page 18, lines 30-34, and page 19, lines 1 and 2. The communication station also includes inventorying means are provided for inventorying the transponder as a function of the correctly received response signal. Page 10, lines 18-31; Fig. 1, inventorying means 7A.

The language of claim 8 relates to a transponder for communication with a communication station. Page 6, lines 27-30; Fig. 2, transponder 2. The transponder includes transponder transmission means for emitting and receiving signals. Page 11, lines 3-13; Fig. 2, transponder transmission means 29. The transponder also includes carrier signal detection means for detecting an unmodulated carrier signal generated and emitted by the communication station and received by the transponder transmission means. Page 11, lines 31-34 and page 12, lines 1-3; Fig. 2, carrier signal detection means 46. The transponder also includes presence-signaling signal generating means for independently generating a presence-signaling signal that can be activated as a function

of the detection of an unmodulated carrier signal. Page 5, lines 28-32 and page 14, lines 17-28; Fig. 2, presence-signaling signal generating means 44. The transponder also includes inventorying command signal detection means for detecting an inventorying command signal generated and emitted by the communication station and received by the transponder transmission means. Page 14, lines 10-16; Fig. 2, inventorying command signal detection means 43. The transponder also includes response signal generating means for generating a response signal permitting the inventorying of the transponder that can be activated as a function of the detection of the inventorying command signal. Page 14, lines 29-33; Fig. 2, response signal generating means 45. The presence-signaling signal generating means generates the presence-signaling signal with a first signal duration and the response signal generating means generates the response signal with a second signal duration, where the first signal duration is shorter than the second signal duration. Page 15, lines 11-15, page 18, lines 30-34, and page 19, lines 1 and 2.

The language of claim 14 relates to an integrated circuit for a transponder for communication with a communication station. Page 6, lines 27-30; Fig. 2, integrated circuit 3. The integrated circuit includes at least one connection for emitting and receiving signals. Page 11, lines 3-13; Fig. 2, a first connection 26 and a second connection 27. The integrated circuit also includes carrier signal detection means for detecting an unmodulated carrier signal generated and emitted by the communication station and received via at least one connection. Page 11, lines 31-34 and page 12, lines 1-3; Fig. 2, carrier signal detection means 46. The integrated circuit also includes presence-signaling signal generating means for independently generating a presence-signaling signals that can be activated as a function of the detection of an unmodulated carrier signal. Page 5, lines 28-32 and page 14, lines 17-28; Fig. 2, presence-signaling signal generating means 44. The integrated circuit also includes inventorying command signal detection means for detecting an inventorying command signal generated and emitted by the communication station and received via at least one connection. Page 14, lines 10-16; Fig. 2, inventorying command signal detection means 43. The integrated circuit also includes response signal generating means for generating a response signal permitting the inventorying of the transponder that can be activated as a function of the detection of the inventorying command signal. Page 14, lines 29-33; Fig. 2, response

signal generating means 45. The presence-signaling signal generating means generates the presence-signaling signal with a first signal duration and the response signal generating means generates the response signal with a second signal duration, where the first signal duration is shorter than the second signal duration. Page 15, lines 11-15, page 18, lines 30-34, and page 19, lines 1 and 2.

#### **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

- A. Whether independent claims 1, 7, 8, and 14 are patentable over the combination of Bauer, Cesar, and Vacherand under 35 U.S.C. 103(a).
- B. Whether dependent claims 3, 10, and 16 are patentable over the combination of Bauer, Cesar, and Vacherand under 35 U.S.C. 103(a).

#### **VII. ARGUMENT**

For the purposes of this appeal, claims 1, 7, 8, and 14 are argued together as a group for purposes of the question of patentability over the combination of Bauer, Cesar, and Vacherand under 35 U.S.C. 103(a). Additionally, claims 3, 10, and 16 are argued together as a group for purposes of the question of patentability over the combination of Bauer, Cesar, and Vacherand under 35 U.S.C. 103(a).

- A. Independent claims 1, 7, 8, and 14 are patentable over the combination of Bauer, Cesar, and Vacherand because the combination of cited references does not teach all of the limitations of the claims.

Appellant respectfully asserts that a *prima facie* case of obviousness has not been established with respect to claims 1, 7, 8, and 14 because the combination of cited references does not teach all of the limitations of the claims.

Claim 1 recites:

A method of inventorying at least one transponder by means of a communication station, wherein the communication station emits an unmodulated carrier signal in a communications range, and wherein the transponder on entering the communications range independently generates a presence-signaling signal and emits the presence-signaling signal in the communications range, and wherein the communication station on receiving a presence-signaling signal emits an inventorying command signal in the communications range, and wherein the transponder on receiving the inventorying command signal emits a response signal in the communications range permitting the inventorying of the transponders, and wherein the communication station, on correctly receiving a response signal undertakes inventorying of the transponders, wherein the transponder emits the presence-signaling signal with a first signal duration and the response signal with a second signal duration, and wherein the first signal duration is shorter than the second signal duration. (Emphasis added.)

Appellant respectfully asserts that the combination of Bauer, Cesar, and Vacherand does not teach that “*the transponder on entering the communications range independently generates a presence-signaling signal and emits the presence-signaling signal in the communications range*” (emphasis added), as recited in claim 1. Claims 7, 8, and 14 recite similar limitations to the above-identified limitation of claim 1. Thus, Appellant respectfully asserts that the combination of Bauer, Cesar, and Vacherand does not teach all of the limitations of claims 1, 7, 8, and 14.

The Final Office Action mailed on December 10, 2009 acknowledges that Bauer in view of Cesar fails to teach the above-identified limitation of claim 1. (See pages 4 and 5 of the Final Office Action). Vacherand is cited as teaching the above-identified limitation of claim 1. (See pages 2 and 5 of the Final Office Action). The Final Office Action suggests that a sequence number of a tag as taught in Vacherand is equivalent to the “*presence-signaling signal*” emitted by the transponder of claim 1. (See pages 2 and 4 of the Final Office Action).

However, Vacherand teaches assigning each tag a sequence number whose binary size is significantly smaller than that of the ID code of the tag for quick detecting of the tags. (See column 3, lines 6-10 of Vacherand). Vacherand further teaches that the sequence number, which is assigned to each tag by an interrogator, has a bit length much

shorter than the ID code length of the corresponding tag. (See column 3, lines 11-18 of Vacherand). That is, Vacherand teaches that the sequence number of each tag is assigned to the tag by the interrogator.

Because Vacherand teaches that the sequence number of each tag is assigned to the tag by the interrogator, Vacherand does not teach that each tag independently generates its own sequence number. Because Vacherand does not teach that each tag independently generates its own sequence number, Appellant respectfully asserts that Vacherand does not teach that “*the transponder on entering the communications range independently generates a presence-signaling signal*” (emphasis added), as recited in claim 1. Thus, Appellant respectfully asserts that the combination of Bauer, Cesar, and Vacherand does not teach all of the limitations of claim 1.

Additionally, the Final Office Action states that:

“the teachings of Vacherand may be applied to any RFID interrogator system for quick detecting of the tags by using a shorter code, and the shorter code may be assigned by the interrogator or pre-assigned in the tag of the interrogator system by one of ordinary skill in the art to achieve the desired results of quicker tag detection using shorter identification codes”

(Emphasis added). (See “Response to Arguments” section on page 2 of the Final Office Action).

That is, the Final Office Action seems to admit that Vacherand teaches that the sequence number of each tag is assigned to the tag or to suggest that the combination of Bauer, Cesar, and Vacherand teaches that a sequence number of Vacherand is assigned to a tag of an interrogator system. Because the Final Office Action suggests that the combination of Bauer, Cesar, and Vacherand teaches assigning a sequence number to a tag of an interrogator system, the combination of Bauer, Cesar, and Vacherand does not teach that a tag of an interrogator system independently generates the sequence number. Thus, according to the logic in the Final Office Action, the combination of Bauer, Cesar, and Vacherand does not teach that “*the transponder on entering the communications*

*range independently generates a presence-signaling signal*" (emphasis added), as recited in claim 1.

Furthermore, the Advisory Action mailed on February 24, 2010 states that:

"In the Final office action, the examiner stated in the response to arguments section the tags of the interrogator system may be pre-assigned instead of dynamically assigning each tag with the shorter code to achieve the desired result of quicker tag detection by one of ordinary skill in the art. In operation, this interrogation system (in view of the teachings of Bauer, Cesar, and Vacherand) achieves the result of having the tags independently generating a presence-signaling signal and emitting the presence signaling signal in the communication range since the presence-signaling signal may be pre-assigned without interrogator interference during a read operation by the interrogator."

(Emphasis added). (See page 2 of the Advisory Action).

The above-identified section of the Advisory Action confirms that the Examiner admits that the combination of Bauer, Cesar, and Vacherand teaches assigning a sequence number to a tag of an interrogator system. Because the combination of Bauer, Cesar, and Vacherand teaches assigning a sequence number to a tag of an interrogator system, a tag of an interrogator system does not independently generate the sequence number. Thus, the combination of Bauer, Cesar, and Vacherand does not teach the limitation that "*the transponder on entering the communications range independently generates a presence-signaling signal*" (emphasis added), as recited in claim 1.

Accordingly, Appellant respectfully asserts that the combination of Bauer, Cesar, and Vacherand does not teach the above-identified limitation of claim 1 and similar limitations of claims 7, 8, and 14. Because the combination of Bauer, Cesar, and Vacherand does not teach all of the limitations of claims 1, 7, 8, and 14, Appellant respectfully asserts that a *prima facie* case of obviousness has not been established with respect to claims 1, 7, 8, and 14.

Claims 3, 5, 6, 20, and 23-25 depend from and incorporate all of the limitations of independent claim 1. Claims 10, 12, 13, and 21 depend from and incorporate all of the limitations of independent claim 8. Claims 16-19 and 22 depend from and incorporate all of the limitations of independent claim 14. Appellant respectfully asserts that claims 3, 5, 6, 10, 12, 13, 16-19, and 20-25 are allowable at least based on allowable claims 1, 8, and 14. Additionally, claims 3, 5, 6, 10, 12, 13, 16-19, and 20-25 may be allowable for further reasons.

Furthermore, Appellant notes that the present Application has received four Office Actions, including two Non-Final Office Actions and two Final Office Actions. However, the MPEP states that “Piecemeal examination should be avoided as much as possible.” (See MPEP §707.07(g)). Accordingly, Appellant requests that the rejections of claims 1, 3, 5-8, 10, 12-14, and 16-25 under 35 U.S.C. § 103(a) be withdrawn.

B. Dependent claims 3, 10, and 16 are patentable over the combination of Bauer, Cesar, and Vacherand because the combination of cited references does not teach all of the limitations of the claims.

Appellant respectfully asserts that a *prima facie* case of obviousness has not been established with respect to claims 3, 10, and 16. Specifically, Appellant respectfully asserts that the combination of Bauer, Cesar, and Vacherand does not teach that “*the presence-signaling signal is not assigned to the transponder*” (emphasis added), as recited in claim 3. Claims 10 and 16 recite similar limitations to the above-identified limitation of claim 3. Thus, Appellant respectfully asserts that the combination of Bauer, Cesar, and Vacherand does not teach all of the limitations of claims 3, 10, and 16.

As described above with respect to the rejection to claim 1, the Final Office Action suggests that a sequence number of a tag as taught in Vacherand is equivalent to the “*presence-signaling signal*” emitted by the transponder of claim 1. (See pages 2 and 4 of the Final Office Action). However, Vacherand teaches that the sequence number of each tag is assigned to the tag by an interrogator. Because Vacherand teaches that the sequence number of a tag is assigned to the tag by an interrogator, Appellant respectfully asserts that Vacherand does not teach that “*the presence-signaling signal is not assigned*

*to the transponder”* (emphasis added) of claim 3. In particular, Vacherand teaches the opposite of the above-identified limitation of claim 3.

Additionally, as stated above with respect to the rejection to claim 1, the Final Office Action seems to suggest that the combination of Bauer, Cesar, and Vacherand teaches that a sequence number of Vacherand is assigned to a tag of an interrogator system. Thus, according to the logic in the Final Office Action, the combination of Bauer, Cesar, and Vacherand teaches the opposite of the limitation that “*the presence-signaling signal is not assigned to the transponder*” (emphasis added), as recited in claim 3.

Furthermore, the Advisory Action states that:

“ The final rejection cited teaches the tags may be pre-assigned with a presence signaling signal (via the shorter code); therefore, during interrogator operation, the interrogator does not assign the presence signaling signal, which means the presence-signaling signal is not assigned to the transponder by the interrogator.”

(Emphasis added). (See page 2 of the Advisory Action).

The above-identified section of the Advisory Action confirms that the Examiner admits that the combination of Bauer, Cesar, and Vacherand teaches assigning a sequence number to a tag of an interrogator system. Because the combination of Bauer, Cesar, and Vacherand teaches assigning a sequence number to a tag of an interrogator system, the combination of Bauer, Cesar, and Vacherand teaches the opposite of the limitation “*the presence-signaling signal is not assigned to the transponder*” (emphasis added), as recited in claim 3.

Accordingly, the combination of Bauer, Cesar, and Vacherand does not teach the above-identified limitation of claim 3 and similar limitations of claims 10 and 16. Because the combination of Bauer, Cesar, and Vacherand does not teach all of the limitations of claims 3, 10, and 16, Appellant respectfully asserts that a *prima facie* case

of obviousness has not been established with respect to claims 3, 10, and 16. Accordingly, Appellant respectfully requests that the rejections of claims 3, 10, and 16 under 35 U.S.C. § 103(a) be withdrawn.

### **VIII. CONCLUSION**

For the reasons stated above, claims 1, 3, 5-8, 10, 12-14, and 16-25 are patentable over the cited references. Thus, the rejections of claims 1, 3, 5-8, 10, 12-14, and 16-25 should be withdrawn. Appellant respectfully requests that the Board reverse the rejections of claims 1, 3, 5-8, 10, 12-14, and 16-25 under 35 U.S.C. 103(a).

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-4019** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-4019** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

/mark a. wilson/

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## **IX. CLAIMS APPENDIX**

1. A method of inventorying at least one transponder by means of a communication station, wherein the communication station emits an unmodulated carrier signal in a communications range, and wherein the transponder on entering the communications range independently generates a presence-signaling signal and emits the presence-signaling signal in the communications range, and wherein the communication station on receiving a presence-signaling signal emits an inventorying command signal in the communications range, and wherein the transponder on receiving the inventorying command signal emits a response signal in the communications range permitting the inventorying of the transponders, and wherein the communication station, on correctly receiving a response signal undertakes inventorying of the transponders, wherein the transponder emits the presence-signaling signal with a first signal duration and the response signal with a second signal duration, and wherein the first signal duration is shorter than the second signal duration.
3. A method as claimed in claim 1, wherein the first signal duration and the second signal duration have a ratio of 1:X, and in that the value X lies in a range between X=10 and X=100, wherein the presence-signaling signal is not assigned to the transponder.
5. A method as claimed in claim 1, wherein the transponder emits a presence-signaling signal with a first transmission parameter and a response signal with a second transmission parameter.
6. A method as claimed in claim 5, wherein one of two different subcarrier frequencies of each subcarrier signal is used, one as first transmission parameter and one as second transmission parameter, wherein the two different subcarrier frequencies are 283 kilohertz and 424 kilohertz.
7. A communication station for communication with at least one transponder and for inventorying at least one transponder, wherein station transmission means are provided

for emitting and receiving signals, and wherein carrier signal generating means are provided for generating an unmodulated carrier signal, the unmodulated carrier signal being emitted by the station transmission means in a communications range, and wherein presence-signaling signal detection means are provided for detecting a presence-signaling signal that is independently generated and emitted by the transponder and received by the station transmission means, and wherein inventorying command signal generating means that can be activated as a function of the detection of a presence-signaling signal are provided for generating an inventorying command signal, and wherein response signal detection means are provided for detecting a response signal which is generated and emitted by the transponder in response to a received inventorying command signal and is received by the station transmission means and which permits inventorying of the transponders, wherein a signal duration of the presence-signaling signal is shorter than a signal duration of the response signal, and wherein inventorying means are provided for inventorying the transponder as a function of the correctly received response signal.

8. A transponder for communication with a communication station, wherein transponder transmission means are provided for emitting and receiving signals, and wherein carrier signal detection means are provided for detecting an unmodulated carrier signal generated and emitted by the communication station and received by the transponder transmission means, and wherein presence-signaling signal generating means that can be activated as a function of the detection of an unmodulated carrier signal are provided for independently generating a presence-signaling signal, and wherein inventorying command signal detection means are provided for detecting an inventorying command signal generated and emitted by the communication station and received by the transponder transmission means, and wherein response signal generating means that can be activated as a function of the detection of the inventorying command signal are provided for generating a response signal permitting the inventorying of the transponder, wherein the presence-signaling signal generating means generates the presence-signaling signal with a first signal duration and wherein the response signal generating means generates the response signal with a second signal duration, and wherein the first signal duration is shorter than the second signal duration.

10. A transponder as claimed in claim 8, wherein the first signal duration and the second signal duration have a ratio of 1:X, the value X lying in a range between X=10 and X=100, wherein the presence-signaling signal is not assigned to the transponder.
12. A transponder as claimed in claim 8, wherein the transponder is designed to generate a presence-signaling signal with a first transmission parameter and to generate a response signal with a second transmission parameter.
13. A transponder as claimed in claim 12, wherein the first transmission parameter and the second transmission parameter are each formed by one of two different subcarrier frequencies of each subcarrier signal.
14. An integrated circuit for a transponder for communication with a communication station, wherein at least one connection is provided for emitting and receiving signals, and wherein carrier signal detection means are provided for detecting an unmodulated carrier signal generated and emitted by the communication station and received via at least one connection, and wherein presence-signaling signal generating means that can be activated as a function of the detection of an unmodulated carrier signal are provided for independently generating a presence-signaling signals, and wherein inventorying command signal detection means are provided for detecting an inventorying command signal generated and emitted by the communication station and received via at least one connection, and wherein response signal generating means that can be activated as a function of the detection of the inventorying command signal are provided for generating a response signal permitting the inventorying of the transponder, wherein the presence-signaling signal generating means generates the presence-signaling signal with a first signal duration and wherein the response signal generating means generates the response signal with a second signal duration, and wherein the first signal duration is shorter than the second signal duration.
16. An integrated circuit as claimed in claim 14, wherein the first signal duration and the second signal duration have a ratio of 1:X, and in that the value X lies in a range between

X=10 and X=100, wherein the presence-signaling signal is not assigned to the transponder.

17. An integrated circuit as claimed in claim 16, wherein the value X lies in a range between X=20 and X=35.
18. An integrated circuit as claimed in claim 14, wherein the integrated circuit is designed to generate a presence-signaling signal with a first transmission parameter and to generate a response signal with a second transmission parameter.
19. An integrated circuit as claimed in claim 18, wherein the first transmission parameter and the second transmission parameter are each formed by one of two different subcarrier frequencies of each subcarrier signal.
20. A method as claimed in claim 1, wherein the presence-signaling signal does not include an identification data ID of the transponder and wherein the response signal includes the identification data ID of the transponder.
21. A transponder as claimed in claim 8, wherein the presence-signaling signal does not include an identification data ID of the transponder.
22. An integrated circuit as claimed in claim 14, wherein the presence-signaling signal does not include an identification data ID of the transponder.
23. A method as claimed in claim 1, wherein the transponder on entering the communications range generates and emits a plurality of presence-signaling signals in the communications range at random intervals to ensure that the communication station reliably receives at least one of the plurality of presence-signaling signal generated and emitted by the transponder.

24. A method as claimed in claim 23, wherein the transponder terminates generation and emission of the plurality of presence-signaling signals on receiving the inventorying command signal.
25. A method as claimed in claim 1, wherein the transponder on entering the communications range generates and emits a plurality of presence-signaling signals in the communications range repeatedly at recurrent intervals to ensure that the communication station reliably receives at least one of the plurality of presence-signaling signal generated and emitted by the transponder.

## **X. EVIDENCE APPENDIX**

There is no evidence submitted with this Appeal Brief.

## **XI. RELATED PROCEEDINGS APPENDIX**

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.